# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

## PCT

### NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents
United States Patent and Trademark Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

| | |
|---|---|
| **Date of mailing** (day/month/year)<br>06 July 2000 (06.07.00) | |
| **International application No.**<br>PCT/US99/26062 | **Applicant's or agent's file reference**<br>98A9-PCT |
| **International filing date** (day/month/year)<br>05 November 1999 (05.11.99) | **Priority date** (day/month/year)<br>05 November 1998 (05.11.98) |
| **Applicant**<br>CROUGHAN, Timothy, P. | |

1. The designated Office is hereby notified of its election made:

   [X] in the demand filed with the International Preliminary Examining Authority on:

   22 May 2000 (22.05.00)

   [ ] in a notice effecting later election filed with the International Bureau on:

2. The election [X] was

   [ ] was not

   made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).



**The International Bureau of WIPO**
**34, chemin des Colombettes**
**1211 Geneva 20, Switzerland**

Facsimile No.: (41-22) 740.14.35

Authorized officer

Juan Cruz

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# PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

RUNNELS, John H.
Taylor, Porter, Brooks
& Phillips, L.L.P.
P.O. Box 2471
Baton Rouge, LA 70821
ETATS-UNIS D'AMERIQUE



# PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

| | |
|---|---|
| Date of mailing *(day/month/year)* | 05.02.2001 |
| Applicant's or agent's file reference<br>98A9-PCT | **IMPORTANT NOTIFICATION** |

| International application No. | International filing date *(day/month/year)* | Priority date *(day/month/year)* |
|---|---|---|
| PCT/US99/26062 | 05/11/1999 | 05/11/1998 |

Applicant
BOARD OF SUPERVISORS OF LOUISIANA STATE... et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

| Name and mailing address of the IPEA/ | Authorized officer |
|---|---|
| European Patent Office<br>D-80298 Munich<br>Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465 | Langhoff, M<br><br>Tel.+49 89 2399-8221 |

Form PCT/IPEA/416 (July 1992)

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
|---|---|---|
| 98A9-PCT | | |
| International application No. | International filing date *(day/month/year)* | Priority date *(day/month/year)* |
| PCT/US99/26062 | 05/11/1999 | 05/11/1998 |
| International Patent Classification (IPC) or national classification and IPC<br>A01H5/10 | | |
| Applicant<br>BOARD OF SUPERVISORS OF LOUISIANA STATE... et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 19 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☒ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement
   - VI ☐ Certain documents cited
   - VII ☒ Certain defects in the international application
   - VIII ☒ Certain observations on the international application

| Date of submission of the demand | Date of completion of this report |
|---|---|
| 22/05/2000 | 05.02.2001 |
| Name and mailing address of the international preliminary examining authority:<br>European Patent Office<br>D-80298 Munich<br>Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465 | Authorized officer<br>Herrera, M<br>Telephone No. +49 89 2399 2090 |

Form PCT/IPEA/409 (cover sheet) (January 1994)

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/26062

## I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:
**Description, pages:**

| | |
|---|---|
| 1-10,12-55 | as originally filed |
| 11 | filed with the demand |

**Claims, No.:**

| | | | | |
|---|---|---|---|---|
| 1-15,31-38,54-73, 75-128 | as received on | 13/11/2000 | with letter of | 09/11/2000 |

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   - ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
   - ☐ the language of publication of the international application (under Rule 48.3(b)).
   - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   - ☐ contained in the international application in written form.
   - ☐ filed together with the international application in computer readable form.
   - ☐ furnished subsequently to this Authority in written form.
   - ☐ furnished subsequently to this Authority in computer readable form.
   - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   - ☐ the description, pages:
   - ☒ the claims, Nos.: 16-30,39-53,74
   - ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

   *(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees the applicant has:

   ☐ restricted the claims.

   ☐ paid additional fees.

   ☐ paid additional fees under protest.

   ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

   ☐ complied with.

   ☒ not complied with for the following reasons:
   **see separate sheet**

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

   ☒ all parts.

   ☐ the parts relating to claims Nos. .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

| | | | |
|---|---|---|---|
| Novelty (N) | Yes: | Claims | 1-15,31-38,54-73,77-80,82-128 |
| | No: | Claims | 75,76,81 |
| Inventive step (IS) | Yes: | Claims | 1-15,31-38,54-60,64-70,72,73,77-80,82-111,113-127 |
| | No: | Claims | 61-63,71,68,112,128 |
| Industrial applicability (IA) | Yes: | Claims | 1-15,31-38,54-73,75-128 |

No: Claims

2. Citations and explanations
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
**see separate sheet**

**Re Item IV**

**Lack of unity of invention**

The subject matter *common* to claims 1, 62, 71 and 75 consists merely in resistance of a plant to the action of a herbicide. This feature is *per se* well known in the prior art and forms part of the skilled person's common knowledge. The common subject matter to these claims is therefore not novel and, consequently, not inventive. The claims above, with their correspondent dependent claims, are not so linked as to form a single general inventive concept as required by Rule 13.1 PCT.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The invention relates to resistance of rice plants to a number of herbicides. In particular a number of plants according to their ATCC accession number are claimed in independent claims 1, 81 and 82. Independent claims 62 and 75 claim define plants resulting from a particular procedure. A process of obtaining plants is defined in independent claim 71. Weed control processes are claimed in independent claims 38, 61, 63, 65, 67, 69, 76, 78, 80, 112 and 128.

The prior art cited in the International search report does not mention or suggest ATCC accession numbers such as claimed in claims 1 and 82. Thus, the plants defined in these claims are to be considered novel and involving an inventive step.
Claim 62 claims plants obtained through a screening procedure, disclaiming plants with ATCC accession number 97523, which is mentioned in US-A-5 545 822. The claim is therefore novel as regards the cited prior art. However, the generic process to obtain said plants by mutation induction, exposure to herbicides at a level inhibiting growth and subsequent screening to identify plants resistant to herbicide such as imazethapyr, is known from the above mentioned document. Similarly, it is known to apply a procedure to control weeds once the resistant trait has been isolated and made available for commercial exploitation, by simple application of the herbicide to which the commercial plant is resistant. As a consequence, the subject matter of claims 61, 62, 63, 71 is novel (because of the disclaimed subject matter), but it cannot be considered

as unexpected for the skilled person aware of the procedure detailed in document US-A-5 545 822 or indeed of common herbicide application techniques. Claims 61, 62, 63, and 71, in addition to 68, 112 and 128 therefore cannot be considered to involve an inventive step within the meaning of Article 33(3) PCT.
Claim 75 refers to a first and a second herbicide resistant AHAS. US-A-5 545 822 discloses such a combined resistance, anticipating the contents of claim 75 and by extension that of claim 76, contrary to Article 33(2) PCT.
The plant with accession number ATCC 75925 is described in US-A-5 545 822, which further discloses individuals of $F_3$ exhibiting resistance characteristics of ATCC 75925 (cf. col. 9), so that claim 81 is not novel.
The subject matter of the remaining claims is not directly disclosed or suggested in the prior art cited in the International Search Report.

**Re Item VII**
**Certain defects in the international application**

The numbering of the claims and the order with which they they have been arranged do not comply with the provisions of Rule 6.1 PCT.

There appears to be no reason which would justify the inappropriateness of drafting the claims, especially the independent ones in the two-part form required by Rule 6.3(b) PCT.

**Re Item VIII**
**Certain observations on the international application**

The subject matter of claims 2 to 7, 9 to 15 and 31 to 37 is contained in the scope, and is therefore a repetition of, the definition of the subject matter according to claim 1. These claims are therefore redundant in scope and contravene the requirement of conciseness of Article 6 PCT.

The method of claim 38 refers to the plants defined in claim 1, with the only difference that primisulfuron may also be used. The plant of claim 1 is defined as a selection among several possibilities. The way of claiming every single selection possibility in a separate independent claim as done for claims 54 to 60, which append on claim 38, is

a repetition of the definition of the subject matter according to claim 38. These claims are not concise, contrary to Article 6 PCT. In general, because of the proliferation of claims, some of which with identical scope, the application fails to comply with the requirement of conciseness of Article 6 PCT. Moreover, lack of clarity of the claims as a whole arises, since the plurality of independent claims makes it difficult, if not impossible, to determine the matter for which protection is sought (what the invention is about), and places an undue burden on the reader seeking to establish the real extent of the claimed subject matter, in contravention also of Rule 6.1(a) PCT.

The use of a non-uniform denomination for the same plant, e.g. PTA-904, PWC-16 and ATCC aaaaa (including the inventor's own denomination), makes the definition of claims unclear and difficult to comprehend for the skilled reader.

application; 0.10 lb ai/A sulfometuron methyl (trade name Oust™) as a pre-emergence application; 0.05 lb ai/A sulfometuron methyl as a post-emergence application; 0.10 lb ai/A nicosulfuron (trade name Accent™) applied pre-emergence; and 0.05 lb ai/A nicosulfuron applied post-emergence. Two $M_3$ seed from each of the twenty-three herbicide-resistant lines were planted in each of four replicate pots for each treatment. Equivalent plantings of control lines were made with (non-resistant) Cypress and Bengal rice seeds.

Samples of the seed harvested from several of these lines of the $M_4$ progeny; namely, samples of $M_5$ seed from each of the seven separate lines designated by the inventor as PWC16, PWC23, CMC29, CMC31, WDC33, WDC37, and WDC38; were separately deposited with the American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, Virginia 20110-2209 on November 2, 1999; and were assigned ATCC Accession Nos. PTA-904, PTA-905, PTA-902, PTA-903, PTA-906, PTA-907, and PTA-908, respectively. Each of these deposits was made pursuant to a contract between ATCC and the assignee of this patent application, Board of Supervisors of Louisiana State University and Agricultural and Mechanical College. Each of the contracts with ATCC provides for permanent and unrestricted availability of these seeds or the progeny of these seeds to the public on the issuance of the U.S. patent describing and identifying the deposit or the publication or the laying open to the public of any U.S. or foreign patent application, whichever comes first, and for the availability of these seeds to one determined by the U.S. Commissioner of Patents and Trademarks (or by any counterpart to the Commissioner in any patent office in any other country) to be entitled thereto under pertinent statutes and regulations. The assignee of the present application has agreed that if any of the seeds on deposit should become nonviable or be lost or destroyed when cultivated under suitable conditions, they will be promptly replaced on notification with a viable sample of the same seeds.

Five other lines, designated by the inventor as PWC17, PWC19, PWC21, PWC22, and CMC27, exhibited lower levels of herbicide resistance. These lines appear to differ both from the lines that have now been deposited with ATCC, and from prior line ATCC 97523. Due to their lower levels of resistance, these lines had not been deposited with ATCC as of the international filing date of the present application. However, these lines may have potential value as breeding material to cross with other sources of herbicide resistance, or with each other, in order to enhance total levels of resistance. If these five lines involve different resistance mechanisms, or different AHAS isozymes as compared to the ATCC-deposited lines, then crossing one of these lines with one of the ATCC-deposited lines could result in a hybrid with an enhanced total level of resistance. Their herbicide resistance levels would not,

What is claimed:

1. A rice plant wherein:

(a) the growth of said plant is resistant to inhibition by one or more of the following herbicides, at levels of herbicide that would normally inhibit the growth of a rice plant: imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, pyrithiobac sodium, or a derivative of any of these herbicides; and

(b) said plant is a derivative of at least one of the plants selected from the group of plants with ATCC accession numbers 203419, 203420, 203421, 203422, 203423, 203424, 203425, 203426, 203427, 203428, 203429, 203430, 203431, 203432, 203433, aaaaa, bbbbb, ccccc, ddddd, eeeee, fffff, and ggggg; and

(c) said plant has the herbicide resistance characteristics of at least one of the plants selected from the group of plants with ATCC accession numbers 203419, 203420, 203421, 203422, 203423, 203424, 203425, 203426, 203427, 203428, 203429, 203430, 203431, 203432, 203433, aaaaa, bbbbb, ccccc, ddddd, eeeee, fffff, and ggggg.

2. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazethapyr, at levels of imazethapyr that would normally inhibit the growth of a rice plant.

3. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazapic, at levels of imazapic that would normally inhibit the growth of a rice plant.

4. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazapyr, at levels of imazapyr that would normally inhibit the growth of a rice plant.

5. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by nicosulfuron, at levels of nicosulfuron that would normally inhibit the growth of a rice plant.

6. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by sulfometuron methyl, at levels of sulfometuron methyl that would normally inhibit the growth of a rice plant.

7. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazaquin, at levels of imazaquin that would normally inhibit the growth of a rice plant.

8. A rice plant as recited in Claim 1, wherein the growth of said plant is additionally resistant to inhibition by primisulfuron, at levels of primisulfuron that would normally inhibit the growth of a rice plant.

9. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazamox, at levels of imazamox that would normally inhibit the growth of a rice plant.

10. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by chlorimuron ethyl, at levels of chlorimuron ethyl that would normally inhibit the growth of a rice plant.

11. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by metsulfuron methyl, at levels of metsulfuron methyl that would normally inhibit the growth of a rice plant.

12. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by rimsulfuron, at levels of rimsulfuron that would normally inhibit the growth of a rice plant.

13. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by thifensulfuron methyl, at levels of thifensulfuron methyl that would normally inhibit the growth of a rice plant.

14. A rice plant as recited in Claim 1, wherein the growth of said plant is additionally resistant to inhibition by tribenuron methyl, at levels of tribenuron methyl that would normally inhibit the growth of a rice plant.

15. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by pyrithiobac sodium, at levels of pyrithiobac sodium that would normally inhibit the growth of a rice plant.

16. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203419, or is any progeny of the plant with ATCC accession number 203419; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203419.

17. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203420, or is any progeny of the plant with ATCC accession number 203420; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203420.

18. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203421, or is any progeny of the plant with ATCC accession number 203421; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203421.

19. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203422, or is any progeny of the plant with ATCC accession number 203422; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203422.

20. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203423, or is any progeny of the plant with ATCC accession number 203423; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203423.

21. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203424, or is any progeny of the plant with ATCC accession number 203424; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203424.

22. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203425, or is any progeny of the plant with ATCC accession number 203425; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203425.

23. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203426, or is any progeny of the plant with ATCC accession number 203426; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203426.

24. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203427, or is any progeny of the plant with ATCC accession number 203427; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203427.

25. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203428, or is any progeny of the plant with ATCC accession number 203428; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203428.

26. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203429, or is any progeny of the plant with ATCC accession number 203429; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203429.

27. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203430, or is any progeny of the plant with ATCC accession number 203430; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203430.

**28.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203431, or is any progeny of the plant with ATCC accession number 203431; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203431.

**29.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203432, or is any progeny of the plant with ATCC accession number 203432; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203432.

**30.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number 203433, or is any progeny of the plant with ATCC accession number 203433; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203433.

**31.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number aaaaa, or is any progeny of the plant with ATCC accession number aaaaa; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number aaaaa.

**32.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number bbbbb, or is any progeny of the plant with ATCC accession number bbbbb; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number bbbbb.

**33.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number ccccc, or is any progeny of the plant with ATCC accession number ccccc; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number ccccc.

**34.** A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number ddddd, or is any progeny of the plant with ATCC accession number ddddd; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number ddddd.

35. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number eeeee, or is any progeny of the plant with ATCC accession number eeeee; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number eeeee.

36. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number fffff, or is any progeny of the plant with ATCC accession number fffff; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number fffff.

37. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number ggggg, or is any progeny of the plant with ATCC accession number ggggg; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number ggggg.

38. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 1, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide comprises imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, pyrithiobac sodium, or a derivative of any of these herbicides.

39. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203419, or is any progeny of the plant with ATCC accession number 203419; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203419.

40. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203420, or is any progeny of the plant with ATCC accession number 203420; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203420.

41. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203421, or is any progeny of the plant with ATCC accession number 203421; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203421.

42. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203422, or is any progeny of the plant with ATCC accession number 203422; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203422.

43. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203423, or is any progeny of the plant with ATCC accession number 203423; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203423.

44. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203424, or is any progeny of the plant with ATCC accession number 203424; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203424.

45. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203425, or is any progeny of the plant with ATCC accession number 203425; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203425.

46. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203426, or is any progeny of the plant with ATCC accession number 203426; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203426.

47. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203427, or is any progeny of the plant with ATCC accession number 203427; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203427.

48. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203428, or is any progeny of the plant with ATCC accession number 203428; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203428.

49. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203429, or is any progeny of the plant with ATCC accession number 203429; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203429.

50. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203430, or is any progeny of the plant with ATCC accession number 203430; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203430.

51. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203431, or is any progeny of the plant with ATCC accession number 203431; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203431.

52. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203432, or is any progeny of the plant with ATCC accession number 203432; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203432.

53. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number 203433, or is any progeny of the plant with ATCC accession number 203433; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203433.

54. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number aaaaa, or is any progeny of the plant with ATCC accession number aaaaa; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number aaaaa.

55. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number bbbbb, or is any progeny of the plant with ATCC accession number bbbbb; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number bbbbb.

56. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number ccccc, or is any progeny of the plant with ATCC accession number ccccc; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number ccccc.

57. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number ddddd, or is any progeny of the plant with ATCC accession number ddddd; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number ddddd.

58. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number eeeee, or is any progeny of the plant with ATCC accession number eeeee; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number eeeee.

59. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number fffff, or is any progeny of the plant with ATCC accession number fffff; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number fffff.

60. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number ggggg, or is any progeny of the plant with ATCC accession number ggggg; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number ggggg

61. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 1, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide comprises primisulfuron, triasulfuron, chlorsulfuron, imazamethabenz methyl, or a derivative of any of these herbicides.

**62.** A herbicide-resistant rice plant, wherein:

**(a)** the growth of said herbicide-resistant plant is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and

**(b)** said herbicide-resistant plant is a derivative of a rice plant obtained by exposing rice plants to mutation-inducing conditions; growing rice plants from the exposed plants, or growing rice plants from progeny of the exposed plants, in the presence of at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and selecting for further propagation rice plants that grow without significant injury in the presence of the herbicide; and

**(c)** said herbicide-resistant plant expresses a functional acetohydroxyacid synthase that is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;

*provided that excluded from the scope of this Claim is*:

**(d)** a plant that is the plant with ATCC accession number 97523; and any mutant, recombinant, or genetically engineered derivative of the plant with ATCC accession number 97523 or of any progeny of the plant with ATCC accession number 97523; and any plant that is the progeny of any of these plants; wherein these derivatives of the plant with ATCC accession number 97523 that are excluded from the scope of this Claim are those that retain the herbicide resistance characteristics of the plant with ATCC accession number 97523.

**63.** A process for controlling weeds in the vicinity of a rice plant as recited in Claim 62, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

**64.** A rice plant as recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one imidazolinone herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

**65.** A process for controlling weeds in the vicinity of a rice plant as recited in Claim 64, said process comprising applying an imidazolinone herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

**66.** A rice plant as recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one sulfonylurea herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

**67.** A process for controlling weeds in the vicinity of a rice plant as recited in Claim 66, said process comprising applying a sulfonylurea herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

**68.** A rice plant as recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one herbicide selected from the group consisting of imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, and pyrithiobac sodium; at levels of the herbicide that would normally inhibit the growth of a rice plant.

**69.** A process for controlling weeds in the vicinity of a rice plant as recited in Claim 68, said process comprising applying to the weeds and to the rice plant at least one herbicide selected from the group consisting of imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, and pyrithiobac sodium; at levels of the herbicide that would normally inhibit the growth of a rice plant.

**70.** A rice plant as recited in Claim 62, wherein the mutation-inducing conditions comprise exposing rice seeds to a mutagen.

**71.** A process for imparting herbicide resistance to rice plants, said process comprising the steps of:

**(a)** exposing rice plants to mutation-inducing conditions;

**(b)** growing rice plants from the exposed plants, or growing rice plants from progeny of the exposed plants, in the presence of at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and

**(c)** selecting for further propagation rice plants that grow without significant injury in the presence of the herbicide.

**72.** A process as recited in Claim 71, wherein the herbicide is selected from the group consisting of imazethapyr, imazapic, and imazapyr.

**73.** A process as recited in Claim 71, wherein said exposing step comprises exposing rice seeds to a mutagen.

**74.** A process as recited in Claim 71, wherein the plants selected for further propagation express a functional acetohydroxyacid synthase that is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

75. A herbicide-resistant rice plant, wherein:

(a) the growth of said herbicide-resistant plant is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;

(b) said herbicide-resistant plant expresses functional first and second resistant acetohydroxyacid synthases, each of which said resistant acetohydroxyacid synthases is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;

(c) said first and second resistant acetohydroxyacid synthases are not identical; and

(d) said first resistant acetohydroxyacid synthase is a mutated form of a first wild-type rice acetohydroxyacid synthase, and said second resistant acetohydroxyacid synthase is a mutated form of a second wild-type rice acetohydroxyacid synthase; wherein the first and second wild-type rice acetohydroxyacid synthases are different enzymes that are normally encoded by different genes of wild-type rice plants.

76. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 75, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

77. A rice plant as recited in Claim 75, wherein the growth of said plant is resistant to inhibition by at least one imidazolinone herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

78. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 77, said process comprising applying an imidazolinone herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

79. A rice plant as recited in Claim 75, wherein the growth of said plant is resistant to inhibition by at least one sulfonylurea herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

80. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 79, said process comprising applying a sulfonylurea herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

81. A rice plant as recited in Claim 75, wherein said plant is a derivative of the plant with ATCC accession number 75295, and said plant additionally has the herbicide resistance characteristics of the plant with ATCC accession number 75295.

| Applicant's or agent's file reference | International application No. 98A9-PCT |
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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 11, line 7-12

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution
American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 02 November 1999 | (Not yet known. Applicant's designation PWC16.) |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 11, line 7-12

**B. IDENTIFICATION OF DEPOSIT** Further deposits are identified on an additional sheet ☐

Name of depositary institution
American Type Culture Collection

Address of depositary institution *(including postal code and country)*

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

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Address of depositary institution *(including postal code and country)*:

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(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

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Manassas, VA 20110-2209
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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

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Address of depositary institution *(including postal code and country)*
10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203419 |

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

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(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

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Address of depositary institution *(including postal code and country)*:

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(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

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Address of depositary institution *(including postal code and country)*:

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Manassas, VA 20110-2209
United States of America

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## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution
American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203426 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

| For receiving Office use only | For International Bureau use only |
|---|---|
| ☑ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer: [illegible] DIVISION 703-305-3600 | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 9, line 28-35

B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203427 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

| For receiving Office use only | For International Bureau use only |
|---|---|
| ☑ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

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(PCT Rule 13*bis*)

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Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203428 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

| For receiving Office use only | For International Bureau use only |
|---|---|
| ☑ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer: [illegible] ROSTAD INTERNATIONAL DIVISION 703-305-3680 | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203429 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

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|---|---|
| ☑ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203430 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

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|---|---|
| ☑ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer: [illegible] INTERNATIONAL DIVISION 703-305-[illegible] | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203431 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

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|---|---|
| ☐ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

## INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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B. IDENTIFICATION OF DEPOSIT — Further deposits are identified on an additional sheet ☐

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203432 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

| For receiving Office use only | For International Bureau use only |
|---|---|
| ☒ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer | Authorized officer |

Form PCT/RO/134 (July 1998)

| Applicant's or agent's file reference | International application No. 98A9-PCT |
|---|---|

INDICATIONS RELATING TO DEPOSITED MICROORGANISM OR OTHER BIOLOGICAL MATERIAL

(PCT Rule 13*bis*)

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Address of depositary institution *(including postal code and country)*:

10801 University Bouevard
Manassas, VA 20110-2209
United States of America

| Date of deposit | Accession Number |
|---|---|
| 05 November 1998 | 203433 |

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)* — This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the International Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

| For receiving Office use only | For International Bureau use only |
|---|---|
| ☐ This sheet was received with the international application | ☐ This sheet was received by the International Bureau on: |
| Authorized officer | Authorized officer |

Form PCT/RO/134 (July 1998)

# [redacted]NT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

# PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

To:
Taylor, Porter, Brooks & Phillips
Attn. RUNNELS, JOHN, H.
P.O. Box 2471
Baton Rouge, Louisiana 70821
UNITED STATES OF AMERICA

[redacted]CEIVED
3-15-00
TAYLOR, PORTER, BROOKS & PHILLIPS

| | |
|---|---|
| Date of mailing *(day/month/year)* 07/03/2000 | |
| Applicant's or agent's file reference 98A9-PCT | **FOR FURTHER ACTION** See paragraphs 1 and 4 below |
| International application No. PCT/US 99/ 26062 | International filing date *(day/month/year)* 05/11/1999 |
| Applicant BOARD OF SUPERVISORS OF LOUISIANA STATE UNI. et al | |

1. [X] The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

**Filing of amendments and statement under Article 19:**
The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Fascimile No.: (41-22) 740.14.35

**For more detailed instructions,** see the notes on the accompanying sheet.

2. [ ] The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. [ ] **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

[ ] the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

[ ] no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90*bis*.1 and 90*bis*.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within **20 months** from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

| Name and mailing address of the International Searching Authority | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL-2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016 | Irene Rbia-Brand |

Form PCT/ISA/220 (July 1998)

# NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

## INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international pbulication. Furthermore, it should be emphasized that provisional protection is available in some States only.

**What parts of the international application may be amended?**

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

**When?**

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

**Where not to file the amendments?**

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

**How?**

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

**The amendments must be made in the language in which the international application is to be published.**

**What documents must/may accompany the amendments?**

**Letter (Section 205(b)):**

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

**The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.**

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped),whether

(i) the claim is unchanged;

(ii) the claim is cancelled;

(iii) the claim is new;

(iv) the claim replaces one or more claims as filed;

(v) the claim is the result of the division of a claim as filed.

**The following examples illustrate the manner in which amendments must be explained in the accompanying letter:**

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."

2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."

3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."

4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

**"Statement under article 19(1)" (Rule 46.4)**

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

**It must be in the language in which the international appplication is to be published.**

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

**Consequence if a demand for international preliminary examination has already been filed**

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

**Consequence with regard to translation of the international application for entry into the national phase**

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY



# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
|---|---|---|
| 98A9-PCT | | |
| International application No. | International filing date *(day/month/year)* | Priority date *(day/month/year)* |
| PCT/US99/26062 | 05/11/1999 | 05/11/1998 |
| International Patent Classification (IPC) or national classification and IPC<br>A01H5/10 | | |
| Applicant<br>BOARD OF SUPERVISORS OF LOUISIANA STATE... et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 19 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☒ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement
   - VI ☐ Certain documents cited
   - VII ☒ Certain defects in the international application
   - VIII ☒ Certain observations on the international application

| Date of submission of the demand | Date of completion of this report |
|---|---|
| 22/05/2000 | 05.02.2001 |
| Name and mailing address of the international preliminary examining authority:<br>European Patent Office<br>D-80298 Munich<br>Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465 | Authorized officer<br>Herrera, M<br>Telephone No. +49 89 2399 2090 |

Form PCT/IPEA/409 (cover sheet) (January 1994)

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/26062

## I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:
**Description, pages:**

| | |
|---|---|
| 1-10,12-55 | as originally filed |
| 11 | filed with the demand |

**Claims, No.:**

| | | | | |
|---|---|---|---|---|
| 1-15,31-38,54-73, 75-128 | as received on | 13/11/2000 | with letter of | 09/11/2000 |

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   - ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
   - ☐ the language of publication of the international application (under Rule 48.3(b)).
   - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   - ☐ contained in the international application in written form.
   - ☐ filed together with the international application in computer readable form.
   - ☐ furnished subsequently to this Authority in written form.
   - ☐ furnished subsequently to this Authority in computer readable form.
   - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   - ☐ the description, pages:
   - ☒ the claims, Nos.: 16-30,39-53,74
   - ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

   *(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees the applicant has:

   ☐ restricted the claims.

   ☐ paid additional fees.

   ☐ paid additional fees under protest.

   ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

   ☐ complied with.

   ☒ not complied with for the following reasons:
   **see separate sheet**

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

   ☒ all parts.

   ☐ the parts relating to claims Nos. .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

| | | | |
|---|---|---|---|
| Novelty (N) | Yes: | Claims | 1-15,31-38,54-73,77-80,82-128 |
| | No: | Claims | 75,76,81 |
| Inventive step (IS) | Yes: | Claims | 1-15,31-38,54-60,64-70,72,73,77-80,82-111,113-127 |
| | No: | Claims | 61-63,71,68,112,128 |
| Industrial applicability (IA) | Yes: | Claims | 1-15,31-38,54-73,75-128 |

No: Claims

2. Citations and explanations
   **see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
**see separate sheet**

**Re Item IV**

**Lack of unity of invention**

The subject matter *common* to claims 1, 62, 71 and 75 consists merely in resistance of a plant to the action of a herbicide. This feature is *per se* well known in the prior art and forms part of the skilled person's common knowledge. The common subject matter to these claims is therefore not novel and, consequently, not inventive. The claims above, with their correspondent dependent claims, are not so linked as to form a single general inventive concept as required by Rule 13.1 PCT.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The invention relates to resistance of rice plants to a number of herbicides. In particular a number of plants according to their ATCC accession number are claimed in independent claims 1, 81 and 82. Independent claims 62 and 75 claim define plants resulting from a particular procedure. A process of obtaining plants is defined in independent claim 71. Weed control processes are claimed in independent claims 38, 61, 63, 65, 67, 69, 76, 78, 80, 112 and 128.

The prior art cited in the International search report does not mention or suggest ATCC accession numbers such as claimed in claims 1 and 82. Thus, the plants defined in these claims are to be considered novel and involving an inventive step.
Claim 62 claims plants obtained through a screening procedure, disclaiming plants with ATCC accession number 97523, which is mentioned in US-A-5 545 822. The claim is therefore novel as regards the cited prior art. However, the generic process to obtain said plants by mutation induction, exposure to herbicides at a level inhibiting growth and subsequent screening to identify plants resistant to herbicide such as imazethapyr, is known from the above mentioned document. Similarly, it is known to apply a procedure to control weeds once the resistant trait has been isolated and made available for commercial exploitation, by simple application of the herbicide to which the commercial plant is resistant. As a consequence, the subject matter of claims 61, 62, 63, 71 is novel (because of the disclaimed subject matter), but it cannot be considered

as unexpected for the skilled person aware of the procedure detailed in document US-A-5 545 822 or indeed of common herbicide application techniques. Claims 61, 62, 63, and 71, in addition to 68, 112 and 128 therefore cannot be considered to involve an inventive step within the meaning of Article 33(3) PCT.
Claim 75 refers to a first and a second herbicide resistant AHAS. US-A-5 545 822 discloses such a combined resistance, anticipating the contents of claim 75 and by extension that of claim 76, contrary to Article 33(2) PCT.
The plant with accession number ATCC 75925 is described in US-A-5 545 822, which further discloses individuals of $F_3$ exhibiting resistance characteristics of ATCC 75925 (cf. col. 9), so that claim 81 is not novel.
The subject matter of the remaining claims is not directly disclosed or suggested in the prior art cited in the International Search Report.

**Re Item VII**
**Certain defects in the international application**

The numbering of the claims and the order with which they they have been arranged do not comply with the provisions of Rule 6.1 PCT.

There appears to be no reason which would justify the inappropriateness of drafting the claims, especially the independent ones in the two-part form required by Rule 6.3(b) PCT.

**Re Item VIII**
**Certain observations on the international application**

The subject matter of claims 2 to 7, 9 to 15 and 31 to 37 is contained in the scope, and is therefore a repetition of, the definition of the subject matter according to claim 1. These claims are therefore redundant in scope and contravene the requirement of conciseness of Article 6 PCT.

The method of claim 38 refers to the plants defined in claim 1, with the only difference that primisulfuron may also be used. The plant of claim 1 is defined as a selection among several possibilities. The way of claiming every single selection possibility in a separate independent claim as done for claims 54 to 60, which append on claim 38, is

a repetition of the definition of the subject matter according to claim 38. These claims are not concise, contrary to Article 6 PCT. In general, because of the proliferation of claims, some of which with identical scope, the application fails to comply with the requirement of conciseness of Article 6 PCT. Moreover, lack of clarity of the claims as a whole arises, since the plurality of independent claims makes it difficult, if not impossible, to determine the matter for which protection is sought (what the invention is about), and places an undue burden on the reader seeking to establish the real extent of the claimed subject matter, in contravention also of Rule 6.1(a) PCT.

The use of a non-uniform denomination for the same plant, e.g. PTA-904, PWC-16 and ATCC aaaaa (including the inventor's own denomination), makes the definition of claims unclear and difficult to comprehend for the skilled reader.

application; 0.10 lb ai/A sulfometuron methyl (trade name Oust™) as a pre-emergence application; 0.05 lb ai/A sulfometuron methyl as a post-emergence application; 0.10 lb ai/A nicosulfuron (trade name Accent™) applied pre-emergence; and 0.05 lb ai/A nicosulfuron applied post-emergence. Two $M_3$ seed from each of the twenty-three herbicide-resistant lines were planted in each of four replicate pots for each treatment. Equivalent plantings of control lines were made with (non-resistant) Cypress and Bengal rice seeds.

Samples of the seed harvested from several of these lines of the $M_4$ progeny; namely, samples of $M_5$ seed from each of the seven separate lines designated by the inventor as PWC16, PWC23, CMC29, CMC31, WDC33, WDC37, and WDC38; were separately deposited with the American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, Virginia 20110-2209 on November 2, 1999; and were assigned ATCC Accession Nos. PTA-904, PTA-905, PTA-902, PTA-903, PTA-906, PTA-907, and PTA-908, respectively. Each of these deposits was made pursuant to a contract between ATCC and the assignee of this patent application, Board of Supervisors of Louisiana State University and Agricultural and Mechanical College. Each of the contracts with ATCC provides for permanent and unrestricted availability of these seeds or the progeny of these seeds to the public on the issuance of the U.S. patent describing and identifying the deposit or the publication or the laying open to the public of any U.S. or foreign patent application, whichever comes first, and for the availability of these seeds to one determined by the U.S. Commissioner of Patents and Trademarks (or by any counterpart to the Commissioner in any patent office in any other country) to be entitled thereto under pertinent statutes and regulations. The assignee of the present application has agreed that if any of the seeds on deposit should become nonviable or be lost or destroyed when cultivated under suitable conditions, they will be promptly replaced on notification with a viable sample of the same seeds.

Five other lines, designated by the inventor as PWC17, PWC19, PWC21, PWC22, and CMC27, exhibited lower levels of herbicide resistance. These lines appear to differ both from the lines that have now been deposited with ATCC, and from prior line ATCC 97523. Due to their lower levels of resistance, these lines had not been deposited with ATCC as of the international filing date of the present application. However, these lines may have potential value as breeding material to cross with other sources of herbicide resistance, or with each other, in order to enhance total levels of resistance. If these five lines involve different resistance mechanisms, or different AHAS isozymes as compared to the ATCC-deposited lines, then crossing one of these lines with one of the ATCC-deposited lines could result in a hybrid with an enhanced total level of resistance. Their herbicide resistance levels would not,

What is claimed:

1. A rice plant wherein:

(a) the growth of said plant is resistant to inhibition by one or more of the following herbicides, at levels of herbicide that would normally inhibit the growth of a rice plant: imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, pyrithiobac sodium, or a derivative of any of these herbicides; and

(b) said plant is a derivative of at least one of the plants selected from the group of plants with ATCC accession numbers PTA-904, PTA-905, PTA-902, PTA-903, PTA-906, PTA-907, and PTA-908; and

(c) said plant has the herbicide resistance characteristics of at least one of the plants selected from the group of plants with ATCC accession numbers PTA-904, PTA-905, PTA-902, PTA-903, PTA-906, PTA-907, and PTA-908.

2. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazethapyr, at levels of imazethapyr that would normally inhibit the growth of a rice plant.

3. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazapic, at levels of imazapic that would normally inhibit the growth of a rice plant.

4. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazapyr, at levels of imazapyr that would normally inhibit the growth of a rice plant.

5. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by nicosulfuron, at levels of nicosulfuron that would normally inhibit the growth of a rice plant.

6. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by sulfometuron methyl, at levels of sulfometuron methyl that would normally inhibit the growth of a rice plant.

7. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazaquin, at levels of imazaquin that would normally inhibit the growth of a rice plant.

8. A rice plant as recited in Claim 1, wherein the growth of said plant is additionally resistant to inhibition by primisulfuron, at levels of primisulfuron that would normally inhibit the growth of a rice plant.

9. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by imazamox, at levels of imazamox that would normally inhibit the growth of a rice plant.

10. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by chlorimuron ethyl, at levels of chlorimuron ethyl that would normally inhibit the growth of a rice plant.

11. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by metsulfuron methyl, at levels of metsulfuron methyl that would normally inhibit the growth of a rice plant.

12. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by rimsulfuron, at levels of rimsulfuron that would normally inhibit the growth of a rice plant.

13. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by thifensulfuron methyl, at levels of thifensulfuron methyl that would normally inhibit the growth of a rice plant.

14. A rice plant as recited in Claim 1, wherein the growth of said plant is additionally resistant to inhibition by tribenuron methyl, at levels of tribenuron methyl that would normally inhibit the growth of a rice plant.

15. A rice plant as recited in Claim 1, wherein the growth of said plant is resistant to inhibition by pyrithiobac sodium, at levels of pyrithiobac sodium that would normally inhibit the growth of a rice plant.

31. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-904, or is any progeny of the plant with ATCC accession number PTA-904; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-904.

32. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-905, or is any progeny of the plant with ATCC accession number PTA-905; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-905.

33. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-902, or is any progeny of the plant with ATCC accession number PTA-902; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-902.

34. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-903, or is any progeny of the plant with ATCC accession number PTA-903; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-903.

35. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-906, or is any progeny of the plant with ATCC accession number PTA-906; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-906.

36. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-907, or is any progeny of the plant with ATCC accession number PTA-907; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-907.

37. A rice plant as recited in Claim 1, wherein said plant is the plant with ATCC accession number PTA-908, or is any progeny of the plant with ATCC accession number PTA-908; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-908.

38. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 1, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide comprises imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, pyrithiobac sodium, or a derivative of any of these herbicides.

54. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-904, or is any progeny of the plant with ATCC accession number PTA-904; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-904.

55. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-905, or is any progeny of the plant with ATCC accession number PTA-905; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-905.

56. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-902, or is any progeny of the plant with ATCC accession number PTA-902; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-902.

57. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-903, or is any progeny of the plant with ATCC accession number PTA-903; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-903.

58. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-906, or is any progeny of the plant with ATCC accession number PTA-906; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-906.

59. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-907, or is any progeny of the plant with ATCC accession number PTA-907; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-907.

60. A process as recited in Claim 38, wherein the plant is the plant with ATCC accession number PTA-908, or is any progeny of the plant with ATCC accession number PTA-908; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number PTA-908.

61. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 1, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide comprises primisulfuron, triasulfuron, chlorsulfuron, imazamethabenz methyl, or a derivative of any of these herbicides.

62. A herbicide-resistant rice plant, wherein:

(a) the growth of said herbicide-resistant plant is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and

(b) said herbicide-resistant plant is a derivative of a rice plant obtained by exposing rice plants to mutation-inducing conditions; growing rice plants from the exposed plants, or growing rice plants from progeny of the exposed plants, in the presence of at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and selecting for further propagation rice plants that grow without significant injury in the presence of the herbicide; and

(c) said herbicide-resistant plant expresses a functional acetohydroxyacid synthase that is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;

*provided that excluded from the scope of this Claim is*:

(d) a plant that is the plant with ATCC accession number 97523; and any mutant, recombinant, or genetically engineered derivative of the plant with ATCC accession number 97523 or of any progeny of the plant with ATCC accession number 97523; and any plant that is the progeny of any of these plants; wherein these derivatives of the plant with ATCC accession number 97523 that are excluded from the scope of this Claim are those that have the same herbicide resistance characteristics as the plant with ATCC accession number 97523.

63. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 62, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

64. A rice plant as recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one imidazolinone herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

65. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 64, said process comprising applying an imidazolinone herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

66. A rice plant as recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one sulfonylurea herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

67. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 66, said process comprising applying a sulfonylurea herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

68. A rice plant as recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one herbicide selected from the group consisting of imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, and pyrithiobac sodium; at levels of the herbicide that would normally inhibit the growth of a rice plant.

69. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 68, said process comprising applying to the weeds and to the rice plant at least one herbicide selected from the group consisting of imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, and pyrithiobac sodium; at levels of the herbicide that would normally inhibit the growth of a rice plant.

70. A rice plant as recited in Claim 62, wherein the mutation-inducing conditions comprise exposing rice seeds to a mutagen.

71. A process for imparting herbicide resistance to rice plants, said process comprising the steps of:

(a) exposing rice plants to mutation-inducing conditions;

(b) growing rice plants from the exposed plants, or growing rice plants from progeny of the exposed plants, in the presence of at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and

(c) selecting for further propagation one or more rice plants that grow without significant injury in the presence of the herbicide; wherein the plants selected for further propagation express a functional acetohydroxyacid synthase that is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; ***and provided that*** the rice plant or plants selected for further propagation do not have the herbicide resistance characteristics of the plant with ATCC accession number 97523.

72. A process as recited in Claim 71, wherein the herbicide is selected from the group consisting of imazethapyr, imazapic, and imazapyr.

73. A process as recited in Claim 71, wherein said exposing step comprises exposing rice seeds to a mutagen.

75. A herbicide-resistant rice plant, wherein:

(a) the growth of said herbicide-resistant plant is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;

(b) said herbicide-resistant plant expresses functional first and second resistant acetohydroxyacid synthases, each of which said resistant acetohydroxyacid synthases is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;

(c) said first and second resistant acetohydroxyacid synthases are not identical; and

(d) said first resistant acetohydroxyacid synthase is a mutated form of a first wild-type rice acetohydroxyacid synthase; and said second resistant acetohydroxyacid synthase is a mutated form of a second wild-type rice acetohydroxyacid synthase; wherein the first and second wild-type rice acetohydroxyacid synthases are different enzymes that are normally encoded by different genes of wild-type rice plants.

76. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 75, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

77. A rice plant as recited in Claim 75, wherein the growth of said plant is resistant to inhibition by at least one imidazolinone herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

78. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 77, said process comprising applying an imidazolinone herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

79. A rice plant as recited in Claim 75, wherein the growth of said plant is resistant to inhibition by at least one sulfonylurea herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

80. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 79, said process comprising applying a sulfonylurea herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

81. A rice plant as recited in Claim 75, wherein said plant is a derivative of the plant with ATCC accession number 75295, and said plant additionally has the herbicide resistance characteristics of the plant with ATCC accession number 75295.

82. A rice plant wherein:

(a) the growth of said plant is resistant to inhibition by one or more of the following herbicides, at levels of herbicide that would normally inhibit the growth of a rice plant: imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, pyrithiobac sodium, or a derivative of any of these herbicides; and

(b) said plant is a derivative of at least one of the plants selected from the group of plants with ATCC accession numbers 203419, 203420, 203421, 203422, 203423, 203424, 203425, 203426, 203427, 203428, 203429, 203430, 203431, 203432, and 203433; and

(c) said plant has the herbicide resistance characteristics of at least one of the plants selected from the group of plants with ATCC accession numbers 203419, 203420, 203421, 203422, 203423, 203424, 203425, 203426, 203427, 203428, 203429, 203430, 203431, 203432, and 203433.

83. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by imazethapyr, at levels of imazethapyr that would normally inhibit the growth of a rice plant.

84. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by imazapic, at levels of imazapic that would normally inhibit the growth of a rice plant.

85. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by imazapyr, at levels of imazapyr that would normally inhibit the growth of a rice plant.

86. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by nicosulfuron, at levels of nicosulfuron that would normally inhibit the growth of a rice plant.

87. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by sulfometuron methyl, at levels of sulfometuron methyl that would normally inhibit the growth of a rice plant.

88. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by imazaquin, at levels of imazaquin that would normally inhibit the growth of a rice plant.

89. A rice plant as recited in Claim 82, wherein the growth of said plant is additionally resistant to inhibition by primisulfuron, at levels of primisulfuron that would normally inhibit the growth of a rice plant.

90. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by imazamox, at levels of imazamox that would normally inhibit the growth of a rice plant.

91. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by chlorimuron ethyl, at levels of chlorimuron ethyl that would normally inhibit the growth of a rice plant.

92. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by metsulfuron methyl, at levels of metsulfuron methyl that would normally inhibit the growth of a rice plant.

93. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by rimsulfuron, at levels of rimsulfuron that would normally inhibit the growth of a rice plant.

94. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by thifensulfuron methyl, at levels of thifensulfuron methyl that would normally inhibit the growth of a rice plant.

95. A rice plant as recited in Claim 82, wherein the growth of said plant is additionally resistant to inhibition by tribenuron methyl, at levels of tribenuron methyl that would normally inhibit the growth of a rice plant.

96. A rice plant as recited in Claim 82, wherein the growth of said plant is resistant to inhibition by pyrithiobac sodium, at levels of pyrithiobac sodium that would normally inhibit the growth of a rice plant.

97. A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203419, or is any progeny of the plant with ATCC accession number 203419; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203419.

98. A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203420, or is any progeny of the plant with ATCC accession number 203420; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203420.

99. A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203421, or is any progeny of the plant with ATCC accession number 203421; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203421.

100. A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203422, or is any progeny of the plant with ATCC accession number 203422; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203422.

101. A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203423, or is any progeny of the plant with ATCC accession number 203423; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203423.

**102.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203424, or is any progeny of the plant with ATCC accession number 203424; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203424.

**103.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203425, or is any progeny of the plant with ATCC accession number 203425; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203425.

**104.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203426, or is any progeny of the plant with ATCC accession number 203426; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203426.

**105.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203427, or is any progeny of the plant with ATCC accession number 203427; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203427.

**106.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203428, or is any progeny of the plant with ATCC accession number 203428; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203428.

**107.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203429, or is any progeny of the plant with ATCC accession number 203429; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203429.

**108.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203430, or is any progeny of the plant with ATCC accession number 203430; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203430.

**109.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203431, or is any progeny of the plant with ATCC accession number 203431; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203431.

**110.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203432, or is any progeny of the plant with ATCC accession number 203432; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203432.

**111.** A rice plant as recited in Claim 82, wherein said plant is the plant with ATCC accession number 203433, or is any progeny of the plant with ATCC accession number 203433; wherein said plant has the herbicide resistance characteristics of the plant with ATCC accession number 203433.

**112.** A process for controlling weeds in the vicinity of a rice plant as recited in Claim 82, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide comprises imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, pyrithiobac sodium, or a derivative of any of these herbicides.

**113.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203419, or is any progeny of the plant with ATCC accession number 203419; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203419.

**114.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203420, or is any progeny of the plant with ATCC accession number 203420; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203420.

**115.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203421, or is any progeny of the plant with ATCC accession number 203421; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203421.

**116.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203422, or is any progeny of the plant with ATCC accession number 203422; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203422.

**117.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203423, or is any progeny of the plant with ATCC accession number 203423; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203423.

**118.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203424, or is any progeny of the plant with ATCC accession number 203424; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203424.

**119.** A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203425, or is any progeny of the plant with ATCC accession number 203425; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203425.

120. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203426, or is any progeny of the plant with ATCC accession number 203426; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203426.

121. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203427, or is any progeny of the plant with ATCC accession number 203427; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203427.

122. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203428, or is any progeny of the plant with ATCC accession number 203428; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203428.

123. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203429, or is any progeny of the plant with ATCC accession number 203429; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203429.

124. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203430, or is any progeny of the plant with ATCC accession number 203430; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203430.

125. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203431, or is any progeny of the plant with ATCC accession number 203431; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203431.

126. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203432, or is any progeny of the plant with ATCC accession number 203432; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203432.

127. A process as recited in Claim 112, wherein the plant is the plant with ATCC accession number 203433, or is any progeny of the plant with ATCC accession number 203433; wherein the plant has the herbicide resistance characteristics of the plant with ATCC accession number 203433.

128. A process for controlling weeds in the vicinity of a rice plant as recited in Claim 82, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide comprises primisulfuron, triasulfuron, chlorsulfuron, imazamethabenz methyl, or a derivative of any of these herbicides.